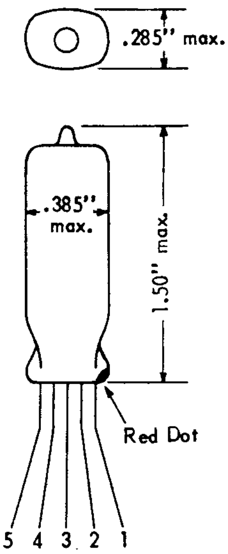
SUBMINIATURE PENTODE

TYPE 1AD4

The 1AD4 is a filament type, fully-shielded sharp cutoff pentode of subminiature construction designed for RF and AF applications in portable equipment. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.



MECHANICAL DATA

ENVELOPE: T-2X3 Glass ♦

BASE: None (0.016" tinned flexible leads. Length: 1.5" min.
Spacing: 0.048" center-to-center)

TERMINAL CONNECTIONS: *(Red dot is adjacent to lead 1)*

Lead 1 Plate
Lead 2 Grid #2
Lead 3 Negative Filament, Grid #3 Shield ▲
Lead 4 Grid #1
Lead 5 Positive Filament, Grid #3▲

MOUNTING POSITION: Any

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCES: *(uufds.)*

Grid #1 to Plate	0.01 max.
Input	4.0
Output	4.0

RATINGS-ABSOLUTE MAXIMUM VALUES: ■

Filament Voltage (dc)	1.25± 20%	volts
Plate Voltage	100	volts
Grid #2 Voltage	100	volts
Plate Dissipation	0.3	watt
Grid #2 Dissipation	0.1	watt
Total Cathode Current	5.5	ma.

CHARACTERISTICS AND TYPICAL OPERATION-CLASS A1 AMPLIFIER:

Filament Voltage (dc)	1.25	volts
Filament Current	0.10	amps.
Plate Voltage	45	volts
Grid #2 Voltage	45	volts
Grid #1 Voltage ●	0	volts
Plate Resistance (approx.)	0.5	meg.
Transconductance	2000	μmhos
Plate Current	3.0	ma.
Grid #2 Current	0.9	ma.
Grid #1 Voltage (approx.) for Gm= 10 μmhos	-3.5	volts

♦ *Bulb is entirely coated with a metallic shield connected to lead 3.*

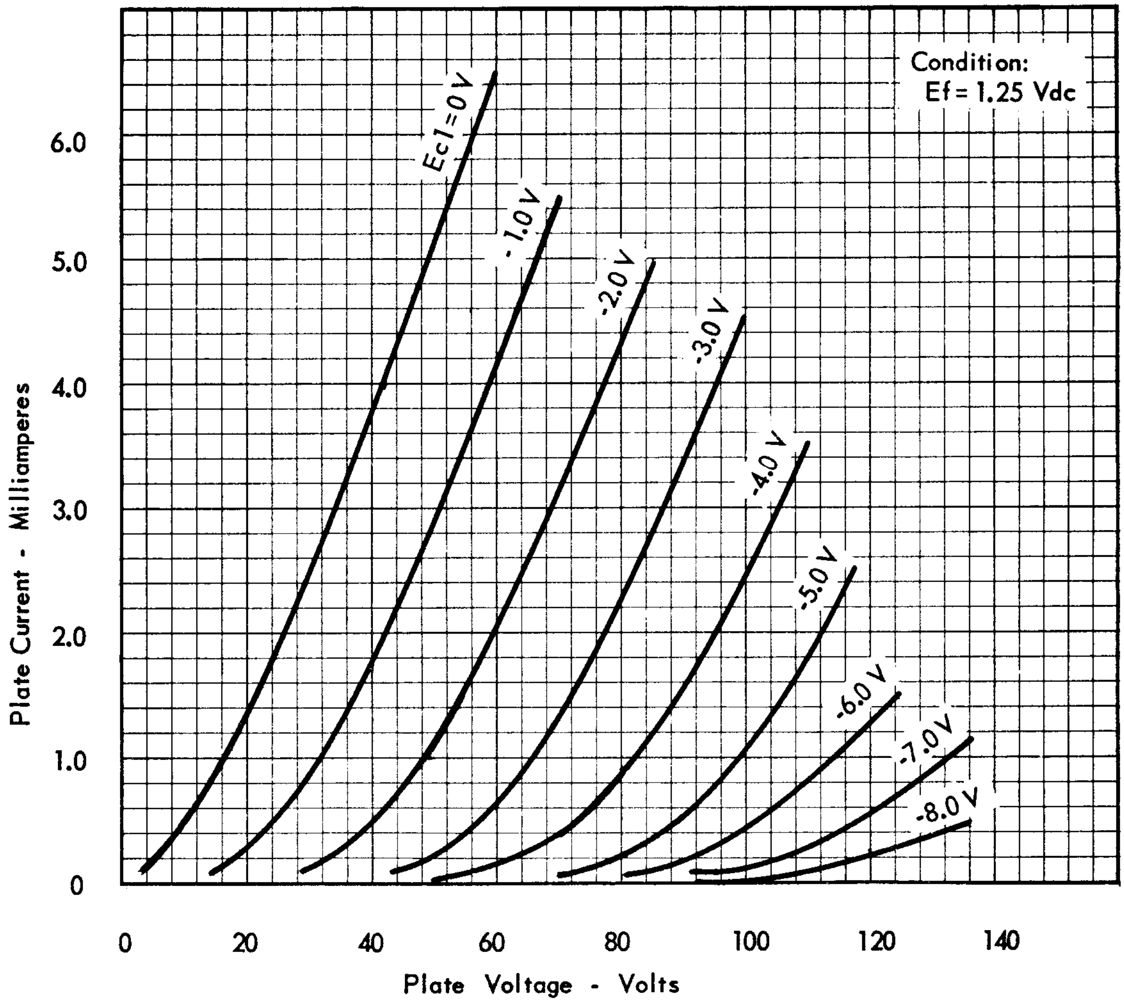
▲ *Grid #3 is composed of two deflector plates, one being connected to lead 3 and the other to lead 5.*

■ *MIL-E-1B paragraphs 3.5.1.1 and 3.5.1.2, permitting maximum plate and screen voltage ratings to be exceeded, shall not apply.*

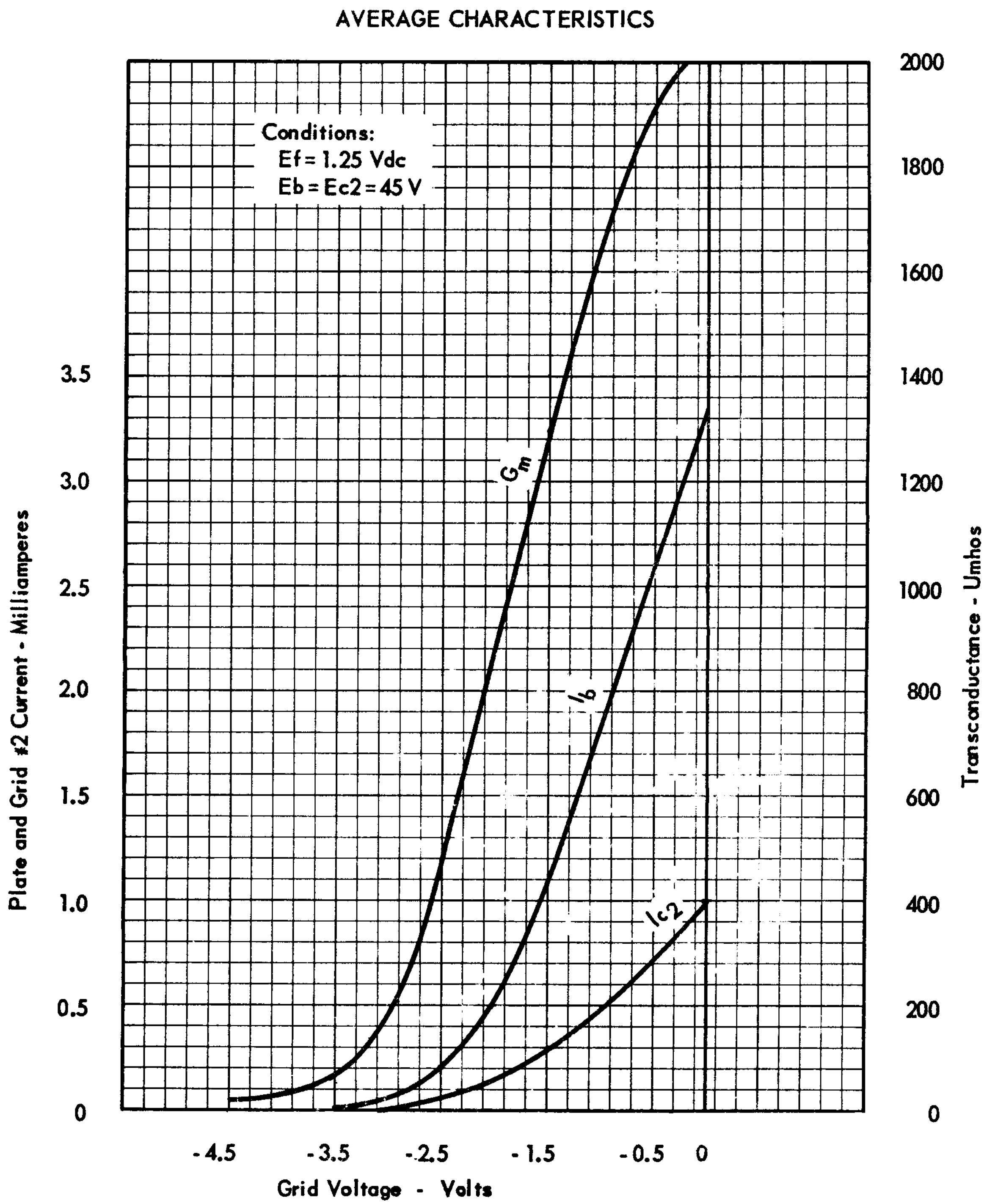
● *Grid #1 resistor=2 megohms.*

Tentative Data

AVERAGE PLATE CHARACTERISTICS
Triode Connected



SUBMINIATURE PENTODE



RAYTHEON

SUBMINIATURE PENTODE

AVERAGE PLATE CHARACTERISTICS

